125W Dual Output Switching Power Supply

RID-125 series

Features :

- Isolated output & GND for CH1,CH2
- AC input range selectable by switch
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- All using 105℃ long life electrolytic capacitors
- Withstand 5G vibration test
- LED indicator for power on
- 100% full load burn-in test
- High realibility
- 3 years warranty

SPECIFICATION

MODEL		RID-125-1224		RID-125-1248		RID-125-2448	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2
	DC VOLTAGE	12V	24V	12V	48V	24V	48V
	RATED CURRENT	3.7A	3.7A	2.3A	2.3A	2A	2A
	CURRENT RANGE Note.6	1 ~ 7A	0.4 ~ 5A	1 ~ 7A	0.2 ~ 2.5A	0.5 ~ 4A	0.2 ~ 2.5A
	RATED POWER Note.6	133.2W		138W		144W	
	RIPPLE & NOISE (max.) Note.2	120mVp-p	200mVp-p	120mVp-p	240mVp-p	200mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	CH1: 11.4 ~ 13.2V		CH1: 11.4 ~ 13.2V		CH1: 22.8 ~ 26.4V	
	VOLTAGE TOLERANCE Note.3	±2.0%	+8,-5%	±2.0%	+8,-5%	±1.0%	±4.0%
	LINE REGULATION Note.4	±0.5%	±1.0%	±0.5%	±1.0%	±0.5%	±1.0%
	LOAD REGULATION Note.5	±1.0%	±5.0%	±1.0%	±5.0%	±1.0%	±3.0%
	SETUP, RISE TIME	500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load					
	HOLD UP TIME (Typ.)	36ms/230VAC 30ms/115VAC at full load					
INPUT	VOLTAGE RANGE	88 ~ 132VAC / 176 ~ 264VAC selected by switch 248 ~ 373VDC(300VAC peak 5sec. No damage)					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY(Typ.)	85%		85%		86%	
	AC CURRENT (Typ.)	3A/115VAC 2A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC					
	LEAKAGE CURRENT	<2mA / 240VAC					
PROTECTION	OVERLOAD	110 ~ 150% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	CH1: 13.8 ~ 16.2V		CH1: 13.8 ~ 16.2V		CH1: 27.6 ~ 32.4V	
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)on CH1 output					
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-6-2 (EN50082-2), heavy industry level, criteria A					
OTHERS	MTBF	218.2Khrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	199*98*38mm (L*W*H)					
	PACKING	0.7Kg; 20pcs/15Kg/0.8CUFT					

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load.
6. Each output can work within current range. But total output power can't exceed rated output power.
7. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)
8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.

125W Dual Output Switching Power Supply

RID-125 series

Features :

- Isolated output & GND for CH1,CH2
- AC input range selectable by switch
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- 170% peak load for CH1
- All using 105℃ long life electrolytic capacitors
- Withstand 5G vibration test
- LED indicator for power on
- 100% full load burn-in test
- High realibility
- 3 years warranty

SPECIFICATION

MODEL		RID-125-1205		RID-125-2405	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	12V	5V	24V	5V
	RATED CURRENT	9.2A	3A	4.6A	3A
	CURRENT RANGE Note.6	2 ~ 10.5A	0 ~ 3A	2 ~ 5.3A	0 ~ 3A
	PEAK LOAD Note.9	15.6A	3A	7.8A	3A
	RATED POWER	125.4W		125.4W	
	RIPPLE & NOISE (max.) Note.2	120mVp-p	80mVp-p	120mVp-p	80mVp-p
	VOLTAGE ADJ. RANGE	CH1: 11.4 ~ 13.2V		CH1: 22.8 ~ 26.4V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±3.0%	±2.0%	±3.0%
	LINE REGULATION Note.4	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION Note.5	±1.0%	±2.0%	±1.0%	±2.0%
	SETUP, RISE TIME	500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load			
	HOLD UP TIME (Typ.)	35ms/230VAC 30ms/115VAC at full load			
INPUT	VOLTAGE RANGE	88 ~ 132VAC / 176 ~ 264VAC selected by switch 248 ~ 373VDC(300VAC peak 5sec., no damage)			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	80%		83%	
	AC CURRENT (Typ.)	3A/115VAC 2A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC			
	LEAKAGE CURRENT	<2mA / 240VAC			
PROTECTION	OVERLOAD	>165% rated output power			
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	CH1: 13.8 ~ 16.2V		CH1: 27.6 ~ 32.4V	
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	-25 ~ +70℃ (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)on CH1 output			
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH			
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B			
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-6-2 (EN50082-2), heavy industry level, criteria A			
OTHERS	MTBF	218.2Khrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	199*98*38mm (L*W*H)			
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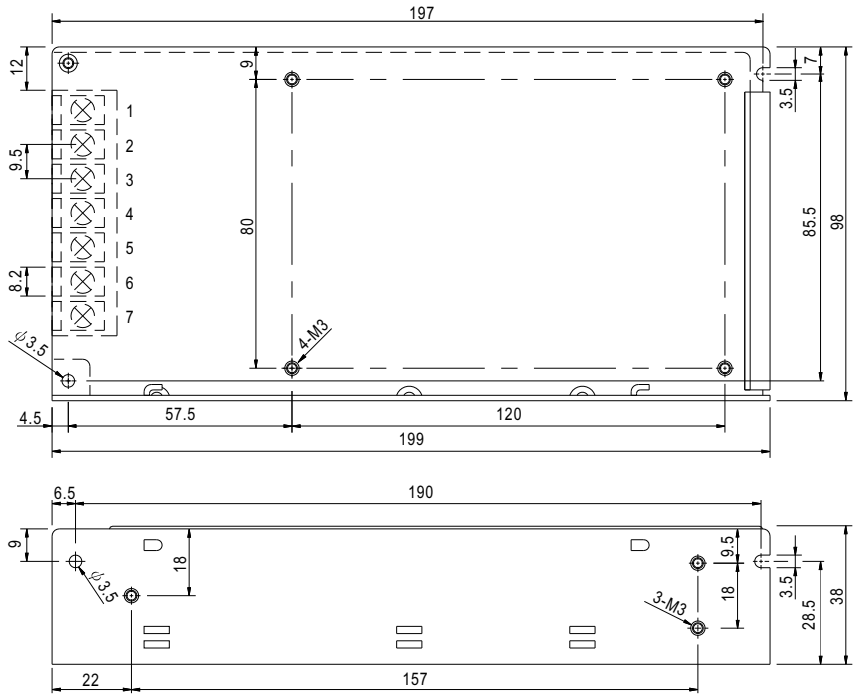
8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
9. 10% duty cycle maximum within every second. Average output power should not exceed the rated power.

■ Mechanical Specification

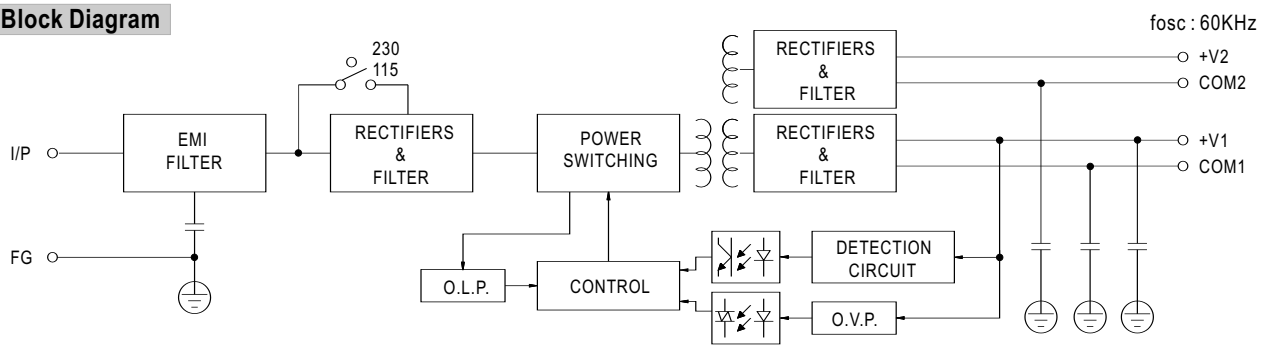
Case No. 902A Unit:mm



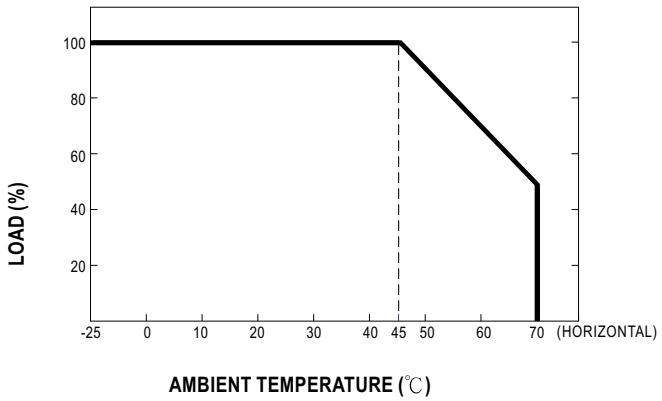
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT +V2
2	AC/N	6	DC OUTPUT COM1
3	FG ⏚	7	DC OUTPUT +V1
4	DC OUTPUT COM2		

■ Block Diagram



■ Derating Curve



■ Static Characteristics